

National Aeronautics and Space Administration





This community of microbes was collected more than one mile deep in a South African platinum mine. It contains star-shaped bacteria that had never been seen before.

EXTREME ABILITY Endoliths make their homes inside of rocks. They can live for hundreds of years by feeding on the traces of iron, phosphorus, and sulfur in their host rocks

EXTREME ENVIRONMENTS Rocks in deserts and on mountain slopes often contain endoliths. Some endoliths have been found within the Earth's crust at a depth of nearly two miles.

EXTREME EXAMPLES Many scientists think that endoliths are a good candidate for the type of life most likely to be discovered living on Mars now or in the past, since harsh conditions may have driven them underground.

Photo Credit: Endoliths in a rock from the Transantarctic Mountains - Kevin Hand (front); Microbial biofilm - G. Wanger, J. Craig Venter Institute and G. Southam, The University of Western Ontario (back). For more information visit http://astrobiology.nasa.gov/